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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/045,199	1	10/22/2001	Brian Sander	111022MMT.US	2287	
30233	7590	04/06/2005	EXAMINER		INER	
TROPIAN I		YAO, KW	YAO, KWANG BIN			
20813 STEVENS CREEK BLVD. CUPERTINO, CA 95014				ART UNIT	PAPER NUMBER	
				2667		
•				DATE MAILED: 04/06/200	DATE MAILED: 04/06/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/045,199	SANDER ET AL.					
Office Action Summary	Examiner	Art Unit					
	Kwang B. Yao	2667					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timy within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 22 O	ctober 2001.						
2a) This action is FINAL . 2b) This	action is non-final.						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) Claim(s) 1-59 is/are pending in the application.	Claim(s) <u>1-59</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6) ☐ Claim(s) is/are rejected.							
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.						
8) Claim(s) <u>1-59</u> are subject to restriction and/or e	☑ Claim(s) <u>1-59</u> are subject to restriction and/or election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau	s have been received. s have been received in Application ity documents have been receive I (PCT Rule 17.2(a)).	on No d in this National Stage					
* See the attached detailed Office action for a list of the standard of the st	of the certified copies not receive	d.					
1) Notice of References Cited (PTO-892)	4) Interview Summary						
2)	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te atent Application (PTO-152)					

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DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-36, drawn to a method of multi-mode RF communications, classified in class 370, subclass 458.
 - II. Claims 37-50, drawn to a multi-mode communications signal processor, classified in class 370, subclass 463.
 - III. Claims 51-59, drawn to a method of shaping a communication signal, classified in class 370, subclass 203.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I, II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I, II, III have separate utility such as the followings: Invention I, II, and III are related as subcombinations disclosed as usable together in a single combination of multi-mode RF communications; Invention I has separate utility of "during a first timeslot, transmitting a first communications signal in accordance with one of a first communications standard using constant-envelope modulation and a second communications standard using varying-envelope modulation; ramping down the first communications signal at the end of the first timeslot; and during a second adjacent timeslot, ramping up a second communications signal and transmitting the same in accordance with a different one of said first communications standard and said second communications standard";

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Invention II has separate utility of "mode selection means for selecting a desired communications standard; multiple signal generators each corresponding to a different communications standard; a digital phase modulator responsive to the mode selection means and to a selected one of the digital signal generators for generating a control signal to control a communications-frequency element; and switching means responsive to the mode selection means for coupling to the digital phase modulator the selected one of the digital signal generators"; Invention III has separate utility of "shaping a communications signal during a transistion period between a first zero or non-zero power level and a second non-zero power level, wherein, during a non-transition period, the communications signal is formed using a pulse shaping filter based on a predetermined pulse shape, the method comprising: deriving from the predetermined pulse shape a ramp shape; and ramping the communications signal between the first and second power levels in accordance with the ramp shape". See MPEP § 806.05(d).

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- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, III, restriction for examination purposes as indicated is proper.
- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

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application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 571-272-3182. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO PRIMARY EXAMINED

March 21, 2005